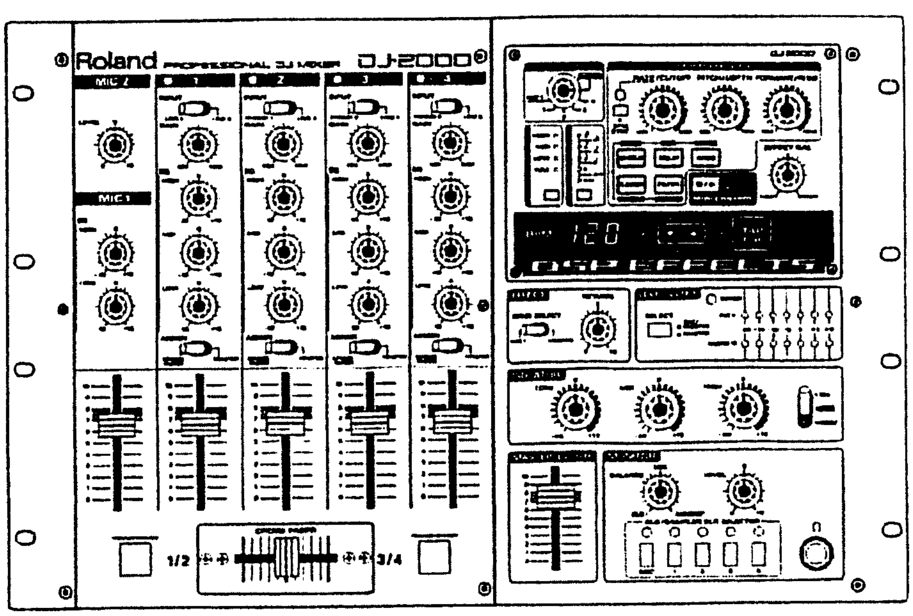
Roland

Roland

PROFESSIONAL DJ MIXER

DJ-2000

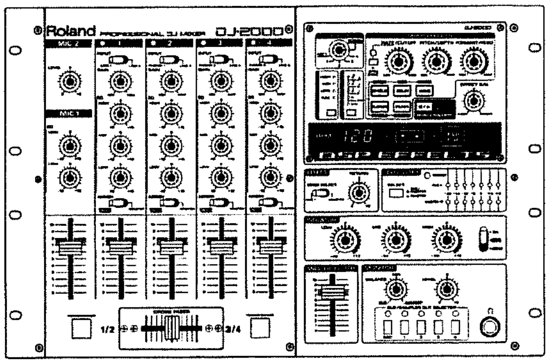
OWNER'S MANUAL



Roland

PROFESSIONAL DJ MIXER

DJ-2000



OWNER'S MANUAL

Thank you for purchasing the Roland PROFESSIONAL DJ MIXER DJ-2000.
Before using this unit, carefully read the sections entitled: "**IMPORTANT SAFETY INSTRUCTIONS**"(page 2), "**USING THE UNIT SAFELY**"(page 3), and "**IMPORTANT NOTES**"(page 4).
These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, this manual should be read in its entirely. The manual should be saved and kept on hand as a convenient reference.

Main Features

- The DJ-2000 is a professional four-channel DJ mixer featuring newly designed DSP effects geared specifically for DJs, as well as a BPM (Beat Per Minute) control feature, opening up new possibilities for DJ performances.
  In addition to its mixer functions, the DJ-2000 makes it easy to create and process the sounds that are central to DJ performances.
- Features numerous built-in isolator to boost or cut volume (from negative infinity to +12 dB). Uses spring-loaded "GRAB Switch", the best kind for switching connected feeds on and off along with the beat.
- Whatever kind of source or machine you want to plug in, the DJ-2000 can handle it, with highly adjustable gain controls.
- By connecting MIDI devices such as the SP-202, VT-1, MC-303/505, JP-8000, or the JX-305, you can put together your own customized DJ system.

◆ With the BOSS SP-202
Features a Sampler output that is separate from the Master output. You can use SP-202 sampling in the background during performances.

◆ With the BOSS VT-1
You can route the output of the dedicated microphone channel (MIC 1) to solely the VT-1.
With the VT-1 connected for use as an effect, your voice becomes a powerful tool in your performances.

◆ With the Roland MC-303/505, JP-8000, or JX-305
The DJ-2000 features a MIDI OUT jack. You can connect MIDI devices such as the MC-303/505, JP-8000 or JX-305 for synchronizing BPM, or controlling Start and Stop functions.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

ATTENTION: RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

IMPORTANT SAFETY INSTRUCTIONS
SAVE THESE INSTRUCTIONS

WARNING - When using electric products, basic precautions should always be followed, including the following:

1. Read all the instructions before using the product.
2. Do not use this product near water — for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
3. This product should be used only with a cart or stand that is recommended by the manufacturer.
4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
8. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
9. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
10. The product should be serviced by qualified service personnel when:
    A. The power-supply cord or the plug has been damaged; or
    B. Objects have fallen, or liquid has been spilled into the product; or
    C. The product has been exposed to rain; or
    D. The product does not appear to operate normally or exhibits a marked change in performance; or
    E. The product has been dropped, or the enclosure damaged.
11. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

For the USA

This product may be equipped with a polarized line plug (one blade wider than the other) . This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.

For Canada

For Polarized Line Plug

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.

For the U.K.

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.
Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About ⚠WARNING and ⚠CAUTION Notices

⚠WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

⚠	The ⚠ symbol alerts the user to important instructions or warnings.The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
⊘	The ⊘ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
●	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

⚠WARNING

- Before using this unit, make sure to read the instructions below, and the Owner's Manual.

- Do not open or perform any internal modifications on the unit. (The only exception would be where this manual provides specific instructions which should be followed in order to put in place user-installable options; see p. 20.)

- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.

- Avoid damaging the power cord. Do not bend it excessively, step on it, place heavy objects on it, etc. A damaged cord can easily become a shock or fire hazard. Never use a power cord after it has been damaged.

- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.

- Protect the unit from strong impact. (Do not drop it!)

- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.

- Always turn the unit off and unplug the power cord before attempting installation of the circuit board (model no. CFX-1; p. 20).

⚠WARNING

- Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

⚠CAUTION

- Always grasp only the plug on the power-supply cord when plugging into, or unplugging from, an outlet or this unit.

- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.

- Never climb on top of, nor place heavy objects on the unit.

- Never handle the power cord or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.

- Before moving the unit, disconnect the power plug from the outlet, and pull out all cords from external devices.

- Before cleaning the unit, turn off the power and unplug the power cord from the outlet (p. 8).

- Whenever you suspect the possibility of lightning in your area, pull the plug on the power cord out of the outlet.

- Install only the specified circuit board(s) (model no. CFX-1). Remove only the specified screws (p. 20).

- When you mount the unit onto a rack, please be careful so that you won't pinch your fingers.

Important Notes

In addition to the items listed under "IMPORTANT SAFETY INSTRUCTIONS" and "USING THE UNIT SAFELY" on pages 2 and 3, please read and observe the following:

Power Supply

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.

Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Additional Precautions

- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- A small amount of heat will radiate from the unit during normal operation.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.

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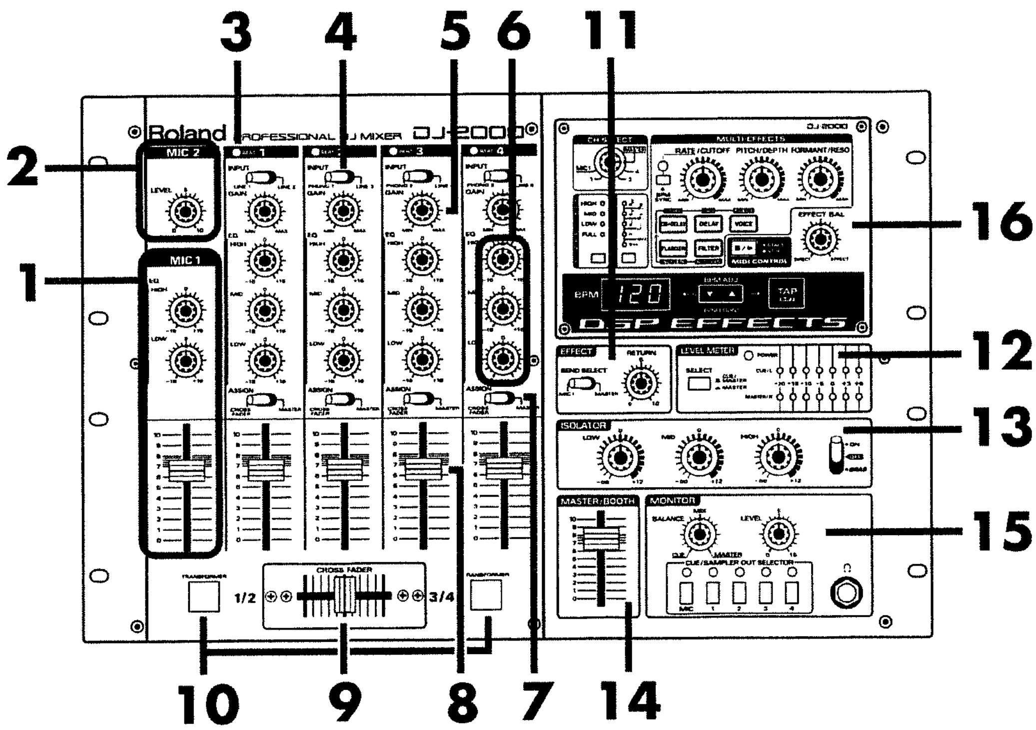
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Names and Functions of Each Part

Channel Section/Master Section



Channel Section

Dedicated Mic Input Channel

1. MIC 1

EQ (Equalizer) Controls

- HIGH: Adjusts the upper frequency range
- LOW: Adjusts the lower frequency range

Channel Fader (MIC 1)

Adjusts the volume of MIC 1 (does not affect MIC 2)

2. MIC 2

LEVEL Control

Adjusts the volume of MIC 2.

* The "MIC 1" and "MIC 2" are specific channels for microphone, please do not connect anything else but microphones.

Line Input Channels 1- 4

3. BEAT Indicator

Flashes with each beat, allowing you to check the tempo and rhythm.

* If the input signal is too strong, the light stops flashing and stays on. If the signal is too weak, the light will not flash. Use the GAIN control to adjust the input signal to the appropriate level.

4. INPUT Switch

Select the position for each channel according to the type equipment connected (p. 8).

- Channel 1: LINE 1 ↔ LINE 2
- Channel 2: PHONO 1 ↔ LINE 3
- Channel 3: PHONO 2 ↔ LINE 4
- Channel 4: PHONO 3 ↔ LINE 5

5. GAIN Control

Adjusts the sensitivity, allowing the proper input levels to be achieved.

6. EQ (Equalizer) Control

- HIGH: Adjusts the upper frequency range
- MID: Adjusts the middle frequency range
- LOW: Adjusts the lower frequency range

7. ASSIGN Switch

Selects the output destination.

8. CHANNEL FADER

Adjusts the output level for each channel.

9. CROSS FADER

By sliding the fader to the left, the sounds from Channels 1/2 are output; slide the fader to the right to hear the output of Channels 3/4. With the fader positioned in the center, the sounds from both sides can be heard.

* The Cross Fader is replaceable. If problems occur, such as noise when the fader is moved, or if the fader doesn't work or the action is unstable, replace with the CFX-1 which is optional Cross Fader for replacing the DJ-2000. When replacing the fader, be absolutely sure that the power is turned off (p. 20).

10. TRANSFORMER Switches

These switches instantly mix sounds into the Cross Fader Channels 1/2 and 3/4.

When the Cross Fader is at the 1/2 (or 3/4) end, then while the 3/4 (or 1/2) TRANSFORMER switch is pressed down, the sounds on Channel 3/4 (or 1/2) are mixed in with Channel 1/2 (or 3/4) at the same volume, and then output.

Master Section

11. EFFECT

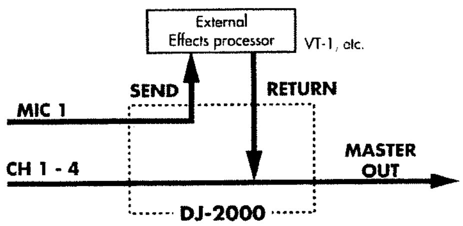
● SEND SELECT Switch

Selects the output going to the EFFECT SEND jack.

◆ When MIC 1 is Selected

Only the signal from the dedicated MIC 1 Channel is output to the EFFECT SEND jack.

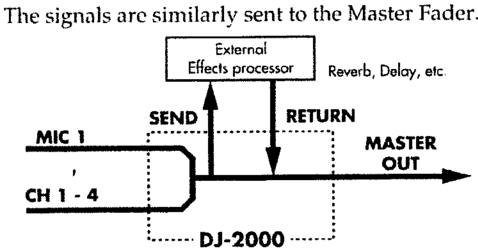
Signals from the other channels, but not MIC, are sent to the Master Fader.



◆ When MASTER is Selected

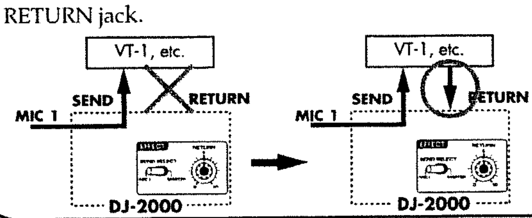
This outputs all of the channels' signals to the EFFECT SEND jack.

The signals are similarly sent to the Master Fader.



If you're wondering why sound from the microphone can't be heard...

When MIC 1 is selected, the MIC signal is sent only to the EFFECT SEND jack, so be sure to also route the signal from connected effects or other devices back to the RETURN jack.



● Return Control

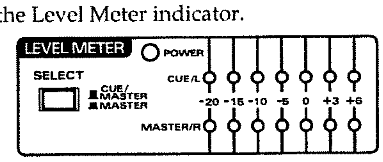
Adjusts the input level from the EFFECT RETURN jack.

12. LEVEL METER

● LEVEL METER

● SELECT SWITCH

Selects the Level Meter indicator.



◆ When the SELECT button is switched to ON ▄, the upper meter indicates the MASTER L level and the lower meter the MASTER R level.

◆ When the SELECT button is switched to OFF ▀, the upper meter indicates the CUE level and the lower meter the MASTER level.

● POWER Indicator

Lights when power is on.

13. ISOLATOR

Boosts or cuts the volume in each frequency range.

● HIGH: -∞ to +12 dB

● MID: -∞ to +12 dB

● LOW: -∞ to +12 dB

● GRAB SWITCH (ISOLATOR ON/OFF)

With the switch at the "ON" position, the Isolator will remain constantly on. Also, while you keep the switch at the "GRAB" position, the Isolator will be on.

However, when you let go (and the switch returns to the center position), the Isolator is switched off.

What is the Isolator?

An isolator can be thought of as being a very powerful equalizer. However, it differs considerably from the equalizers that are used for compensating for hall acoustics.

Although, like an equalizer, it features separate high-, mid, and low-range controls, with the DJ-2000's Isolator, turning the knob fully counterclockwise completely cuts the frequency range; and turning it all the way clockwise boosts the range by 12 dB.

HIGH → For cymbals and high-pitched instruments

MID → For vocals and other mid-range sounds

LOW → For drums (kick, or bass drum) and other low-frequency sounds

Additionally, you can use the GRAB switch to instantly mark the rhythm.

Use this combination of controls and the GRAB switch to deliver even more dynamic DJ performances.

14. MASTER/BOOTH Fader

Adjusts the final output level of the mix.

15. MONITOR

● BALANCE Control

Adjusts the headphone (CUE ↔ MASTER) volume balance.

The sound from CUE is selected with the CUE/SAMPLER OUT SELECTOR switch.

Turning the knob counterclockwise completely gives you only the sound from CUE, turning it fully clockwise gives you only the MASTER output, and setting the control in the center sends both the CUE and MASTER signals.

● LEVEL

Adjusts the headphone output volume level.

● CUE/SAMPLER OUT SELECTOR Switch

This is used in selecting the channel output from the SAMPLER OUT jack (or headphone CUE).

* The MASTER fader and CHANNEL fader does not affect the output from this jack (nor the headphone volume).

* When recording with samplers, DAT, or by other means, returning the output of the recording devices may make the sound unsteady.

◆ When recording, set the input channel fader handling the output of the recording device to 0.

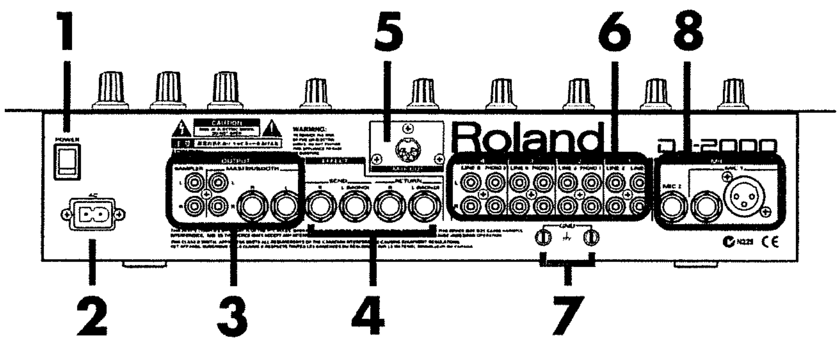
◆ Make sure that the input channel handling the output of the recording device and the channel selected with the CUE/SAMPLER OUT SELECTOR switch are not the same.

◆ When using the BOSS SP-202 or other such device, set the SOURCE MIX switch to OFF.

● Headphone Jack (Stereo-ready)

16. DSP EFFECT Section (p. 10)

Rear Panel



1. POWER Switch

* Before turning on the power to the DJ-2000, make sure the DJ-2000's faders and volume controls, as well as those on any connected equipment, are turned completely down.

2. AC Inlet

For connecting the included AC power cord.

3. OUTPUT Jacks

● SAMPLER (RCA Phono Type)

Output jack for recording.

Use this jack for connecting samplers or other external devices.

* The MASTER fader and CHANNEL fader does not affect the signals output from this jack.

(Rated Output Level: -10 dBm)

* When recording with samplers, DAT, are other means, returning the output of the recording devices may make the sound unsteady.

◆ When recording, set the input channel fader from the output of the connected recording device to 0.

◆ Make sure that the input channel handling the output of the recording device is not the same as the channel selected with the CUE/SAMPLER OUT SELECTOR switch.

◆ When using the BOSS SP-202 or other such device, set the SOURCE MIX switch to OFF.

● MASTER/BOOTH

(Standard Phone Type/RCA Phono Type)

This is the Master output jack. Since you can have two systems connected at the same time, you can use the standard phone jacks as the output to the main speakers, and the RCA phono jacks for the monitor system output.

4. EFFECT (Standard Phone Type)

For connecting external effects.

● SEND: Outputs the signal to effects.

● RETURN: Inputs the signal returning from the effect(s).

5. MIDI OUT

This connector provides output of MIDI data. Connect between here and the MIDI IN on the rhythm machine, sequencer, or other MIDI device you wish to connect.

6. INPUT Jack (RCA Phono Type)

● Channel 1: LINE 1/LINE 2

● Channel 2: PHONO 1/LINE 3

● Channel 3: PHONO 2/LINE 4

● Channel 4: PHONO 3/LINE 5

7. GND Terminal

Connect the record player ground wire here.

8. MIC Inputs

● MIC 1 (XLR Type/TRS Standard Phone Type)

* Use either type of plug, but not both. If you connect both at the same time, you may not be able to obtain sufficient volume levels.

● MIC 2 (TRS Standard phone type)

* The "MIC 1" and "MIC 2" are specific channels for microphone, please do not connect anything else but microphones.

* To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

* Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

Devices for input → DJ-2000 → Power Amp., etc.

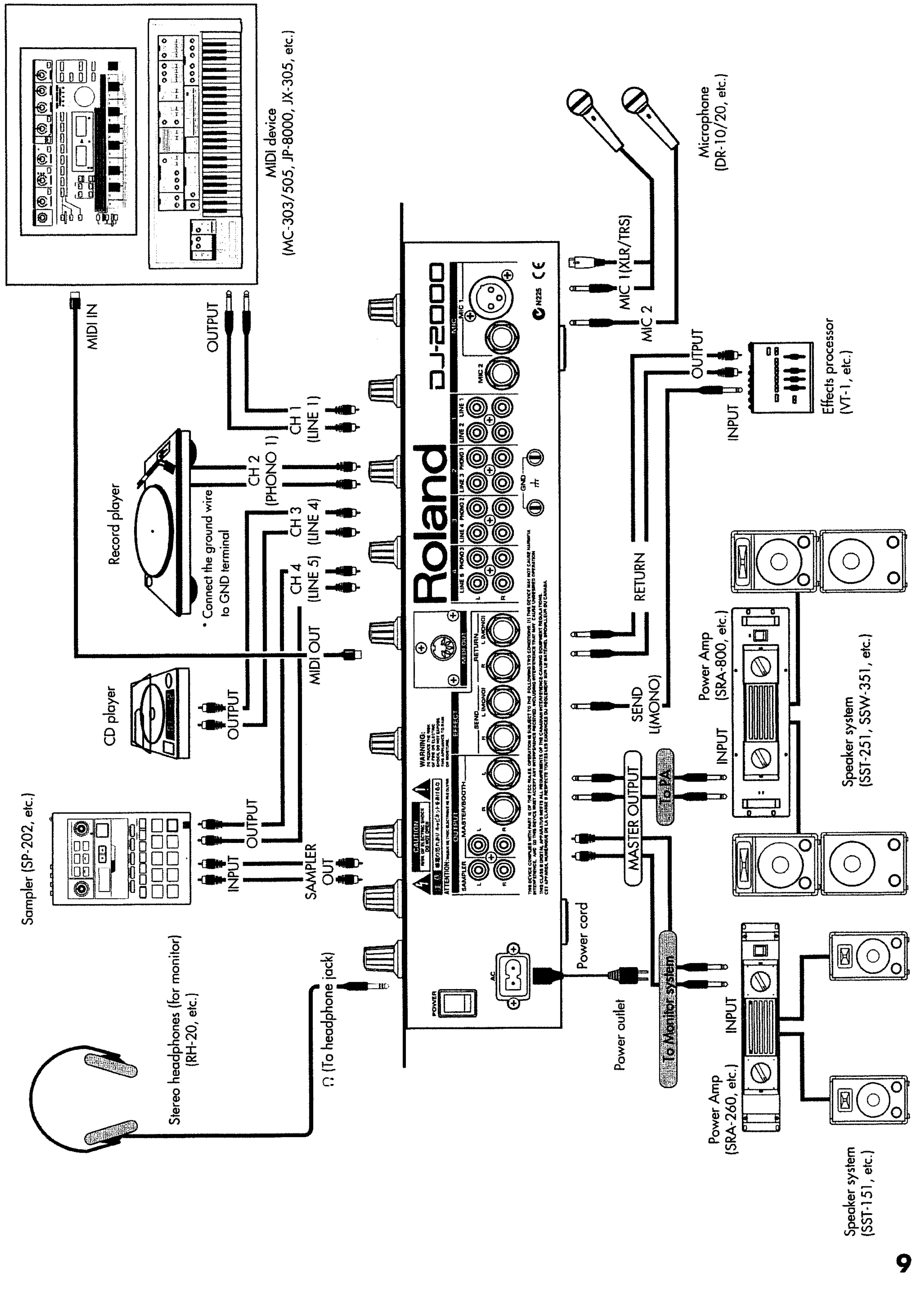
(When quitting and turning off power, reverse the above order.)

* This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

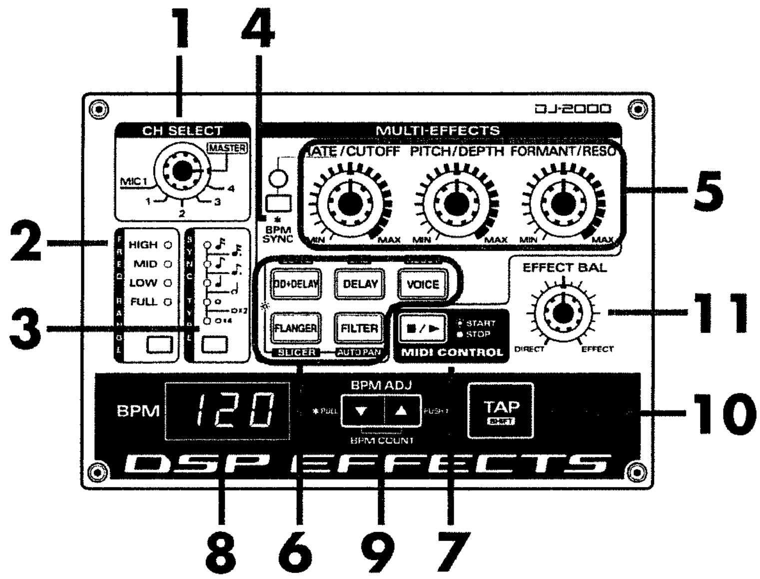
* Howling could be produced depending on the location of microphones relative to speakers. This can be remedied by:

1. Changing the orientation of the microphone(s).
2. Relocating microphone(s) at a greater distance from speakers.
3. Lowering volume levels.

Example of a DJ System



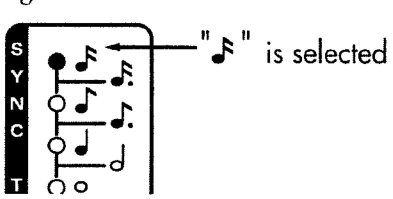
The DSP Effects Section: Names and Functions



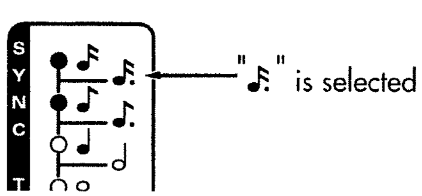
1. Channel Select (CH SELECT)
This selects the channel to which the effect is applied.

2. Frequency Range (FREQ RANGE)
This selects the frequency range to which the effect is applied.
● FULL (All Frequency Ranges): Applies effects to all frequency ranges.
● HIGH (High Range): Applies effects to the higher frequency ranges.
● MID (Middle Range): Applies effects to the middle frequency ranges.
● LOW (Low Range): Applies effects to the lower frequency ranges.

3. Sync Type (SYNC TYPE)
This is for selecting the beat for synchronizing the DSP effect. BPM is the standard used for the beat.
● When only one LED (indicator) is lit or flashes, the beat at the right of the indicator is selected.



● When two indicators are lit or flash, the beat between these two indicators is selected.



4. BPM SYNC
● BPM SYNC Button
With this button pressed, DSP effects can be synchronized in time with the beat selected for SYNC TYPE.
See the descriptions for each effect.
● BPM SYNC Indicator
Flashes in time with the beat when BPM SYNC is on.

5. Parameter Controls
● RATE/CUTOFF
See the descriptions for each effect, and the PARAMETER CHART (p.17) for more on the functions this knob performs.
● PITCH/DEPTH
See the descriptions for each effect, and the PARAMETER CHART (p.17) for more on the functions this knob performs.
● FORMANT/RESO (Resonance)
See the descriptions for each effect, and the PARAMETER CHART (p.17) for more on the functions this knob performs.

6. Effect Select Buttons
These select the type of effect to be added. (p.11)

7. MIDI CONTROL Button
This button is used to start and stop a connected MIDI device. (p.19)

8. BPM Display
This displays the currently recorded BPM. (p.18)

9. BPM ADJ Buttons
These are used for manually setting the BPM. (p.18)

10. TAP Button
This is used for setting the BPM in real time. (p.18)
Additionally, this works as a SHIFT key when making the following settings.
● When selecting effects (p.12,13,14,15,16)
● When setting the BPM in 0.1 units (p.18)
● When automatically synchronizing MIDI devices "start" with the beat (p.19)

11. EFFECT BAL (Effect Balance)

This adjusts the volume balance of the direct signal of the channel selected with (CH SELECT) and the effect signal. Turning the knob all the way counterclockwise (DIRECT) produces only the direct signal (the sound with no effect), and turning it completely clockwise (EFFECT) outputs only the signal with the effect.

* If the frequency range selected with (FREQ RANGE) is not set to FULL (i.e., when set to HIGH, MID, or LOW), then turning the (CH SELECT) knob clockwise (EFFECT) outputs only the effects signal for the selected range. However, turning the knob counter-clockwise (DIRECT) outputs the direct signal of FULL (all ranges).

About Each Effect

The DSP effects section features the ten types of effect shown below.

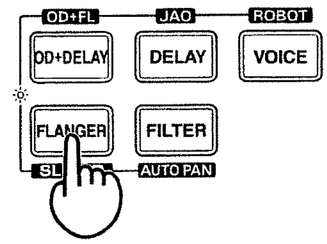
- OD+DELAY (Overdrive + Short Delay) (p.12)
- OD+FL (Overdrive + Flanger) (p.12)
- DELAY (p.13)
- JAO (p.13)
- VOICE (p.14)
- ROBOT (p.14)
- FLANGER (p.15)
- SLICER (p.15)
- FILTER (p.16)
- AUTO PAN (p.16)

Pressing the buttons once selects the effect pairs shown below.

- OD+DELAY/OD+FL
- DELAY/JAO
- VOICE/ROBOT
- FLANGER/SLICER
- FILTER/AUTO PAN

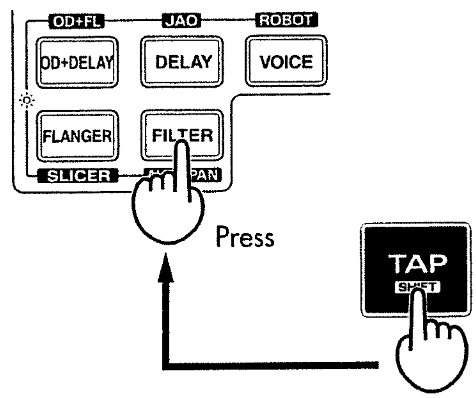
How to Select Effects

- To select the effect indicated on the button itself:



press the button (LED lights)

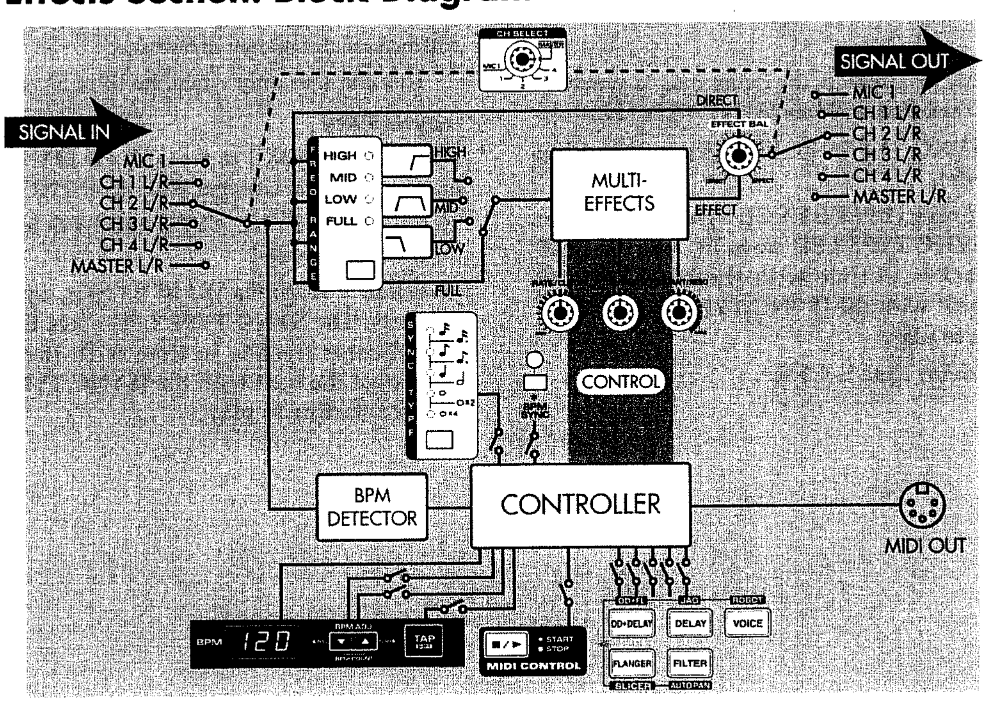
- To select the effect indicated around the button:



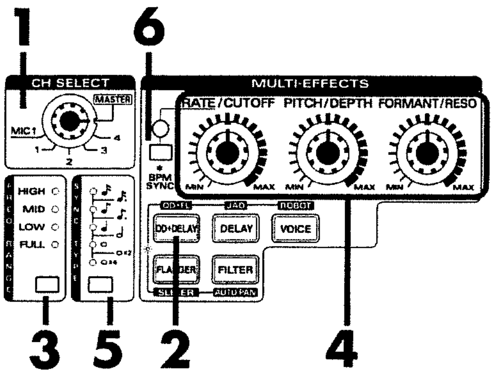
press the button while holding down the [SHIFT key (TAP button)] (LED begins flashing)

* If you change the effect while playing, the sound could be cut off momentarily.

The DSP Effects Section: Block Diagram



OD+DELAY (Overdrive + Short Delay)
Adds mild distortion and delay to the sound



1. Select the channel you want the effect added to. (CH SELECT knob)
2. Press [OD+DELAY], and confirm that its indicator has lit.
3. Select the frequency range for the effect. (FREQ RANGE button)
4. Turn the parameter control knobs to adjust the effects.

Knob Functions

● RATE/CUTOFF

Adjusts the cutoff frequency. Turning the knob counterclockwise will cut high-range frequency.

● PITCH/DEPTH

Adjusts the depth of the overdrive. Turning the knob clockwise will emphasize the distortion.

● FORMANT/RESO (Resonance)

Adjusts the amount of feedback. Turning the knob clockwise will increase the number of delay repetitions.

* This changes only when the BPM SYNC is ON.

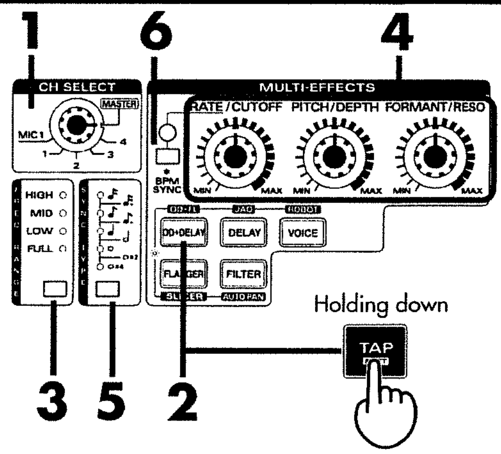
☆Sync Play

When [BPM SYNC] is pressed, the delay time is synchronized to the beat selected with the [SYNC TYPE] button.

5. Select the SYNC TYPE; the LED begins blinking (standby mode).
6. When you press [BPM SYNC], synchronization starts. The SYNC TYPE LED stays lit, and the BMP indicator flashes in time with the beat. You can change the beat with the [SYNC TYPE] button even after starting to play.

* The longest delay time is 1.3 sec.

OD+FL (Overdrive + Flanger)
Adds mild distortion and a metallic reverberation to the sound



1. Select the channel you want the effect added to. (CH SELECT knob)
2. While holding down [SHIFT key (TAP button)], press [OD+DELAY]. The indicator begins blinking.
3. Select the frequency range for the effect. (FREQ RANGE button)
4. Turn the parameter control knobs to adjust the effects.

Knob Functions

● RATE/CUTOFF

Adjusts the cutoff frequency. Turning the knob counterclockwise will cut high-range frequency.

● PITCH/DEPTH

Adjusts the depth of the overdrive. Turning the knob clockwise will emphasize the distortion.

● FORMANT/RESO (Resonance)

Adjusts the amount of feedback. Turning the knob clockwise will increase the amount of feedback.

* This changes only when the BPM SYNC is ON.

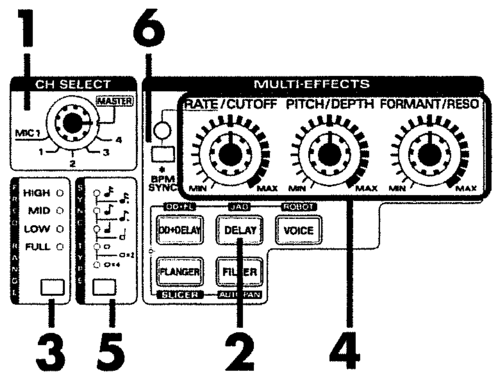
☆Sync Play

When [BPM SYNC] is pressed, the LFO rate is synchronized to the beat selected with the [SYNC TYPE] button.

5. Select the SYNC TYPE; the LED begins blinking (standby mode).
6. When you press [BPM SYNC], synchronization starts. The SYNC TYPE LED stays lit, and the BMP indicator flashes in time with the beat. You can change the beat with the [SYNC TYPE] button even after starting to play.

DELAY

Adds delay to the sound



1. Select the channel you want the effect added to. (CH SELECT knob)
2. Press [DELAY]. Its indicator lights.
3. Select the frequency range for the effect. (FREQ RANGE button)
4. Turn the parameter control knobs to adjust the effects.

Knob Functions

● RATE/CUTOFF

Adjusts the delay time. Turning the knob clockwise will make the delay time longer.

* This changes only when the BPM SYNC is ON.

● PITCH/DEPTH

Adjusts the HF damp frequency. Turning the knob counter-clockwise will cut high-range frequency of effect signal.

● FORMANT/RESO (Resonance)

Adjusts the amount of feedback. Turning the knob clockwise will increase the number of delay repetitions.

☆Sync Play

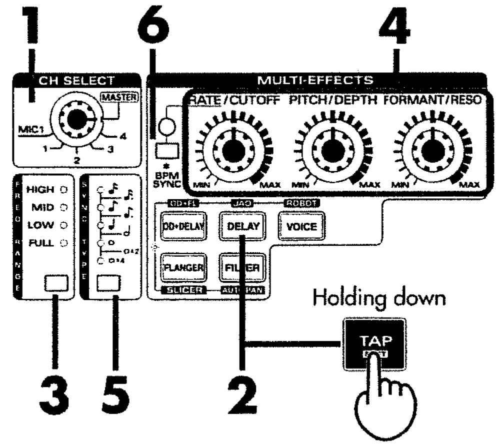
When [BPM SYNC] is pressed, the delay time is synchronized to the beat selected with the [SYNC TYPE] button.

5. Select the SYNC TYPE; the LED begins blinking (standby mode).
6. When you press [BPM SYNC], synchronization starts. The SYNC TYPE LED stays lit, and the BMP indicator flashes in time with the beat. You can change the beat with the [SYNC TYPE] button even after starting to play.

* The longest delay time is 1.3 sec.

JAO

This effect changes the sound so it sounds like it has been passed through a pipe



1. Select the channel you want the effect added to. (CH SELECT knob)
2. While holding down [SHIFT key (TAP button)], press [DELAY]. The indicator begins blinking.
3. Select the frequency range for the effect. (FREQ RANGE button)
4. Turn the parameter control knobs to adjust the effects.

Knob Functions

● RATE/CUTOFF

Adjusts the rate. Turning the knob clockwise will make the cycle shorter and the pitch higher.

* This changes only when the BPM SYNC is ON.

● PITCH/DEPTH

Adjusts the depth. Turning the knob clockwise will make the sound deeper.

● FORMANT/RESO (Resonance)

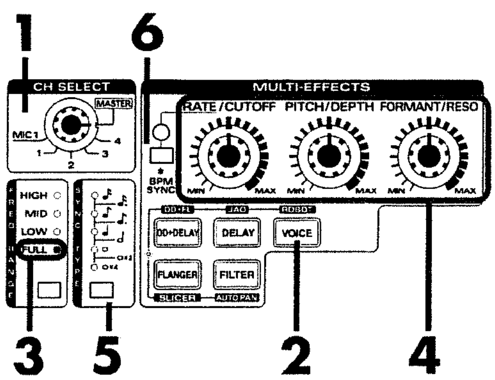
Adjusts the resonance. Turning the knob clockwise will make the sound more unusual.

☆Sync Play

When [BPM SYNC] is pressed, the vibrato rate is synchronized to the beat selected with the [SYNC TYPE] button.

5. Select the SYNC TYPE; the LED begins blinking (standby mode).
6. When you press [BPM SYNC], synchronization starts. The SYNC TYPE LED stays lit, and the BMP indicator flashes in time with the beat. You can change the beat with the [SYNC TYPE] button even after starting to play.

VOICE
This effect changes the pitch and tone of voice



1. Select the channel you want the effect added to. (CH SELECT knob)
2. Press [VOICE], and confirm that its indicator has lit.
3. For this effect, [FREQ RANGE] is fixed at [FULL].
4. Turn the parameter control knobs to adjust the effects.

Knob Functions

● RATE/CUTOFF

Adjusts the LFO rate, modifying the formant. Turning the knob clockwise will make the cycle shorter.

* This changes only when the BPM SYNC is ON.

● PITCH/DEPTH

Adjusts the pitch. Turning the knob clockwise will make the voice higher.

● FORMANT/RESO (Resonance)

Adjusts the formant. Turning the knob clockwise will make the voice thinner.

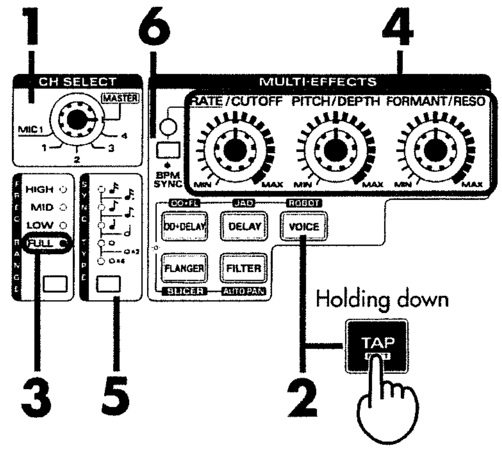
☆Sync Play

When [BPM SYNC] is pressed, the LFO rate is synchronized to the beat selected with the [SYNC TYPE] button.

5. Select the SYNC TYPE; the LED begins blinking (standby mode).
6. When you press [BPM SYNC], synchronization starts. The SYNC TYPE LED stays lit, and the BMP indicator flashes in time with the beat. You can change the beat with the [SYNC TYPE] button even after starting to play.

ROBOT
This effect makes voices sound robotic and mechanical

•This works best with vocal input.



1. Select the channel you want the effect added to. (CH SELECT knob)

* It may not function as expected with sounds other than vocals.

2. While holding down [SHIFT key (TAP button)], press [VOICE]. The indicator begins blinking.
3. For this effect, [FREQ RANGE] is fixed at [FULL].
4. Turn the parameter control knobs to adjust the effects.

Knob Functions

● RATE/CUTOFF

Adjusts the LFO rate, modifying the formant. Turning the knob clockwise will make the cycle shorter.

* This changes only when the BPM SYNC is ON.

● PITCH/DEPTH

Adjusts the pitch. Turning the knob clockwise will create a higher robotic voice.

● FORMANT/RESO (Resonance)

Adjusts the formant. Turning the knob clockwise will create a thinner robotic voice.

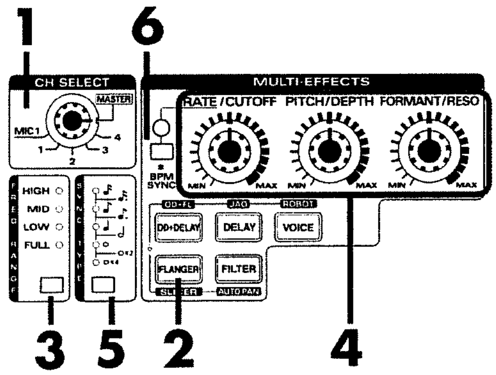
☆Sync Play

When [BPM SYNC] is pressed, the LFO rate is synchronized to the beat selected with the [SYNC TYPE] button.

5. Select the SYNC TYPE; the LED begins blinking (standby mode).
6. When you press [BPM SYNC], synchronization starts. The SYNC TYPE LED stays lit, and the BMP indicator flashes in time with the beat. You can change the beat with the [SYNC TYPE] button even after starting to play.

FLANGER
Adds metallic reverberation to the sound

•Sharp and mechanical distortion is created.



1. Select the channel you want the effect added to. (CH SELECT knob)
2. Press [FLANGER], and confirm that its indicator has lit.
3. Select the frequency range for the effect. (FREQ RANGE button)
4. Turn the parameter control knobs to adjust the effects.

Knob Functions

● RATE/CUTOFF

Adjusts the LFO rate. Turning the knob clockwise will make the cycle shorter.

* This changes only when the BPM SYNC is ON.

● PITCH/DEPTH

Adjusts the depth. Turning the knob clockwise will deepen the movement.

● FORMANT/RESO (Resonance)

Adjusts the resonance. Turning the knob clockwise will make the sound more unusual.

☆Sync Play

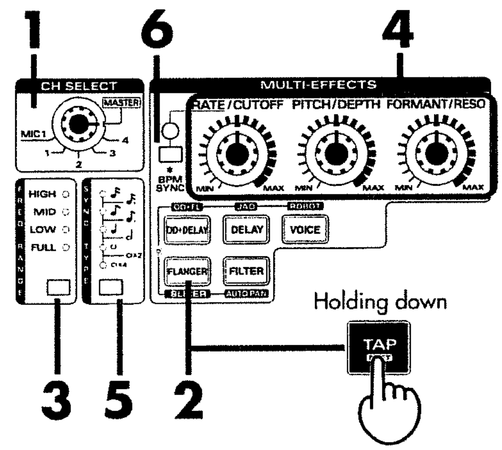
When [BPM SYNC] is pressed, the LFO rate is synchronized to the beat selected with the [SYNC TYPE] button.

5. Select the SYNC TYPE; the LED begins blinking (standby mode).
6. When you press [BPM SYNC], synchronization starts. The SYNC TYPE LED stays lit, and the BMP indicator flashes in time with the beat. You can change the beat with the [SYNC TYPE] button even after starting to play.

SLICER
Consecutively cuts the sound/adds modulation

•By consecutively cutting the sound, it provides an effect like backing phrases.

•This effect works well with sustained notes.



1. Select the channel you want the effect added to. (CH SELECT knob)
2. While holding down [SHIFT key (TAP button)], press [Franger]. The indicator begins blinking.
3. Select the frequency range for the effect. (FREQ RANGE button)
4. Turn the parameter control knobs to adjust the effects.

Knob Functions

● RATE/CUTOFF

Selects the timing pattern. Five types of accent patterns are included. For each patterns, refer to page 17 "SLICER Pattern Chart".

● PITCH/DEPTH

Adjusts the accent level. Turning the knob clockwise will emphasize the intonation.

● FORMANT/RESO (Resonance)

Adds the accent pattern to the timing pattern. Five types of timing patterns are included. For each patterns, refer to page 17 "SLICER Pattern Chart".

☆Sync Play

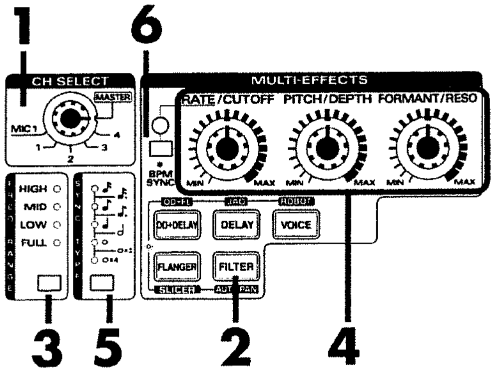
When [BPM SYNC] is pressed, the timing pattern is synchronized to the beat selected with the [SYNC TYPE] button.

5. Select the SYNC TYPE; the LED begins blinking (standby mode).
6. When you press [BPM SYNC], synchronization starts. The SYNC TYPE LED stays lit, and the BMP indicator flashes in time with the beat. You can change the beat with the [SYNC TYPE] button even after starting to play.

FILTER

This effect applies a filter to the sound

•You can use this to brighten or darken the tone, and give it a distinctive character.



1. Select the channel you want the effect added to. (CH SELECT knob)
2. Press [FILTER], and confirm that its indicator has lit.
3. Select the frequency range for the effect. (FREQ RANGE button)
4. Turn the parameter control knobs to adjust the effects.

Knob Functions

● RATE/CUTOFF

Adjusts the cutoff frequency. Turning the knob counterclockwise will cut high-range frequency.

● PITCH/DEPTH

Adjusts the depth. Turning the knob clockwise will deepen the movement.

* This changes only when the BPM SYNC is ON.

● FORMANT/RESO (Resonance)

Adjusts the resonance. Turning the knob clockwise will make the sound more unusual.

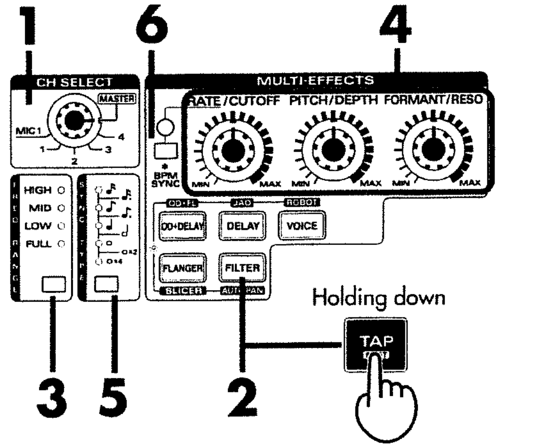
☆Sync Play

When [BPM SYNC] is pressed, the LFO rate is synchronized to the beat selected with the [SYNC TYPE] button.

5. Select the SYNC TYPE; the LED begins blinking (standby mode).
6. When you press [BPM SYNC], synchronization starts. The SYNC TYPE LED stays lit, and the BMP indicator flashes in time with the beat. You can change the beat with the [SYNC TYPE] button even after starting to play.

AUTO PAN

This automatically localizes the sound at a position between left and right in the stereo field



1. Select the channel you want the effect added to. (CH SELECT knob)
2. While holding down [SHIFT key (TAP button)], press [FILTER]. The indicator begins blinking.
3. Select the frequency range for the effect. (FREQ RANGE button)
4. Turn the parameter control knobs to adjust the effects.

Knob Functions

● RATE/CUTOFF

Adjusts the panning speed. Turning the knob clockwise will quicken the effect.

* This changes only when the BPM SYNC is ON.

● PITCH/DEPTH

Adjusts the width of the panning. Turning the knob clockwise will widen the width of the right to left panning.

● FORMANT/RESO (Resonance)

Adjusts the placement of the panning center. Turning the knob clockwise will shift it to the right, while turning it counterclockwise will shift it to the left.

☆Sync Play

When [BPM SYNC] is pressed, the panning speed is synchronized to the beat selected with the [SYNC TYPE] button.

5. Select the SYNC TYPE; the LED begins blinking (standby mode).
6. When you press [BPM SYNC], synchronization starts. The SYNC TYPE LED stays lit, and the BMP indicator flashes in time with the beat. You can change the beat with the [SYNC TYPE] button even after starting to play.

PARAMETER CHART

EFFECTS	BPM SYNC	What's synchronized?	RATE/CUTOFF	PITCH/DEPTH	FORMANT/RESONANCE
OD+DELAY	OFF→		CUTOFF	DRIVE	———
	ON→	DELAY TIME	CUTOFF	DRIVE	FEEDBACK
OD+FLANGER	OFF→		CUTOFF	DRIVE	———
	ON→	LFO RATE	CUTOFF	DRIVE	FEEDBACK
DELAY	OFF→		DELAY TIME	HF DUMP	FEEDBACK
	ON→	DELAY TIME	———	HF DUMP	FEEDBACK
JAO	OFF→		VIBRATE RATE	DEPTH	RESONANCE
	ON→	VIBRATE RATE	———	DEPTH	RESONANCE
VOICE	OFF→		LFO RATE	PITCH	FORMANT
	ON→	LFO RATE	———	PITCH	FORMANT
ROBOT	OFF→		LFO RATE	PITCH	FORMANT
	ON→	LFO RATE	———	PITCH	FORMANT
FLANGER	OFF→		LFO RATE	DEPTH	RESONANCE
	ON→	LFO RATE	———	DEPTH	RESONANCE
SLICER	OFF→		TIMING PTN	ACCENT LEVEL	ACCENT PTN
	ON→	TIMING PTN	TIMING PTN	ACCENT LEVEL	ACCENT PTN
FILTER	OFF→		CUTOFF	———	RESONANCE
	ON→	LFO RATE	CUTOFF	DEPTH	RESONANCE
AUTO PAN	OFF→		RATE	WIDTH	POSITION
	ON→	RATE	———	WIDTH	POSITION

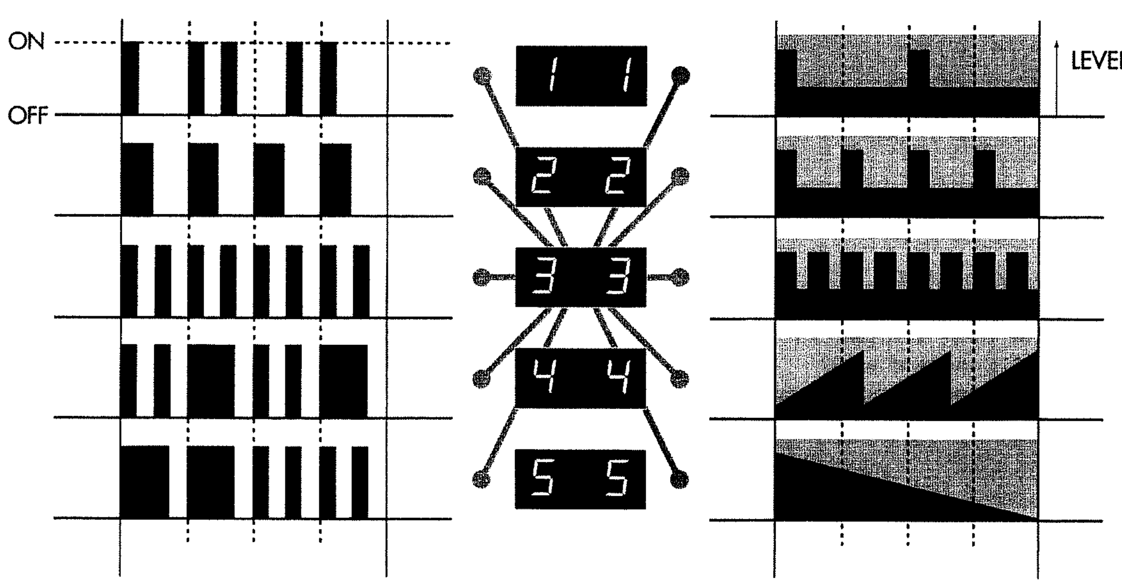
SLICER PATTERN CHART

TIMING PATTERN

RATE/CUTOFF

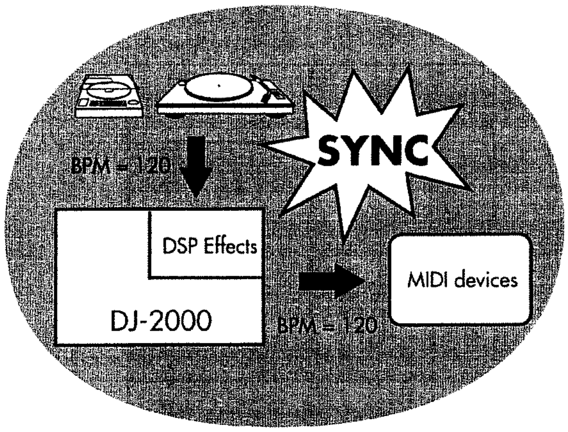
ACCENT PATTERN

FORMANT/RESONANCE



About BPM Control

The BPM controls, which consist of:
"BPM settings" and "Synchronizing MIDI devices with BPM" allow you to synchronize the internal DSP effects and connected MIDI devices with signals of Record or CD players.



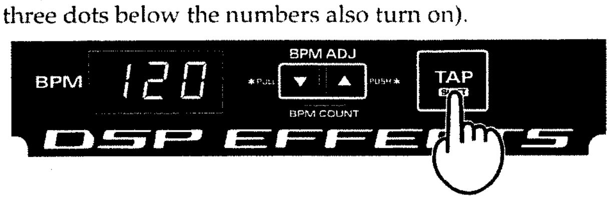
● The blinking dot under the numbers in the BPM display lets you check the beat at a glance.
● Although any increments less than a single beat are not shown in the display, values to a single place to the right of the decimal point are still recorded and played.

* BPM stands for "beats per minute," and represents the number of quarter notes played in one minute.
* The default BPM value is set to 120.0 when the power is turned on.
* The BPM value can be set in a range from 40.0 to 240.0. (90.0 to 180.0 with automatic measurement).

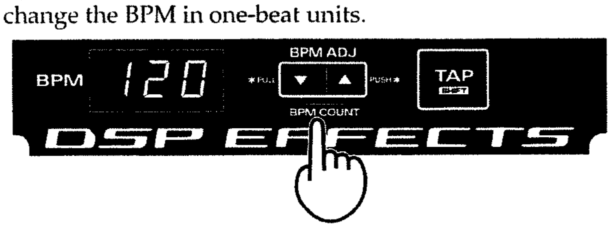
BPM Settings

You can set the BPM in the following three ways.

1. TAP Button (Setting the BPM in BPM Real Time)
Using quarter notes as the reference beat, when you tap the TAP button four times, the BPM is figured automatically, and that value shows up in the BPM display (the three dots below the numbers also turn on).

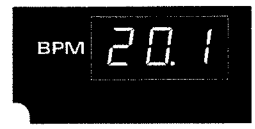


2. BPM Adjust Button (Manually Changing the Current BPM)
When you know the preset BPM value, you can also change the current BPM manually.
By pressing the BPM ADJ [▲][▼] buttons, you can change the BPM in one-beat units.



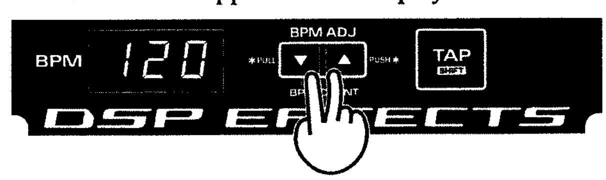
When you do this while holding down [SHIFT key (TAP button)], you can change the BPM in units of one-tenth of a beat per minute. When you do this, the first digit on the left shifts, indicating the number to the right of the decimal point.

ex. BPM = 120.1

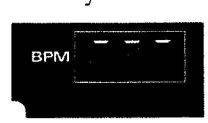


3. BPM COUNT (Automatic Measurement)
The BPM of connected equipment (record players, CD players, etc.) can be measured automatically, within the range between 90.0 and 180.0 beats per minute.
* When you use the automatic measurement, adjust the input sensitivity of the signal you are trying to measure with the GAIN knob for the channel containing the signal until the BEAT indicator is flashing in time with the beat, then try the automatic measurement again.

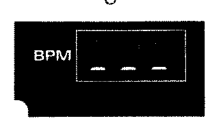
1. **Press both BPM buttons at the same time. The BPM of the signal chosen with CHANNEL SELECT is measured. While it is being measured, "---" is shown in the display.**
2. **The BPM then appears in the display.**



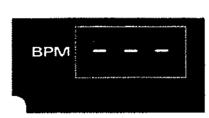
* Automatic measurement can determine BPM from 90.0 to 180.0.
* When the input sensitivity of the channel to be measured is not appropriate, the display will respond as follows:
  Try the automatic measurement again after adjusting the sensitivity with the GAIN and EQ's LOW knobs.
* You may not be able to measure some signals.



The input level is too high.



The input level is too low.



Now being measured.

Synchronizing MIDI devices with BPM

The DJ-2000 sends Timing Clock System Realtime Messages that are synchronized with the selected BPM via the MIDI OUT connector. The [MIDI CONTROL] button can also be used to send Start/Stop System Realtime Messages.

Once a MIDI device that supports the use of System Realtime Messages has been connected to the DJ-2000's MIDI OUT, you can control its BPM sync, as well as start and stop it remotely.

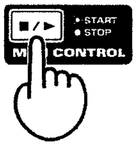
1. Connect the DJ-2000's MIDI OUT connector with the MIDI IN connector on your sequencer, rhythm machine, or other MIDI device.

* Set the sync mode of the connected MIDI device to "slave."

* You can't synchronize MIDI devices that don't handle System Realtime Messages.

2. Press the [MIDI CONTROL] button to start and stop the MIDI device.

* Pressing the [MIDI CONTROL] button when its light is off turns on the MIDI device; pressing it when the light is on stops the MIDI device.

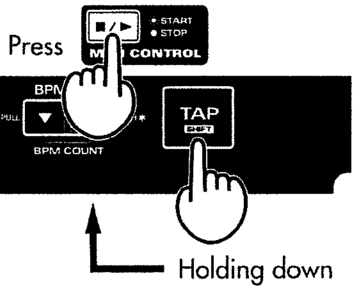


Advanced Operation

Adjusting the Synchronization Timing of MIDI Devices 1

([TAP Button] + [MIDI CONTROL] Button)

You can have a MIDI device start with its timing synchronized to the quarter-note BPM.

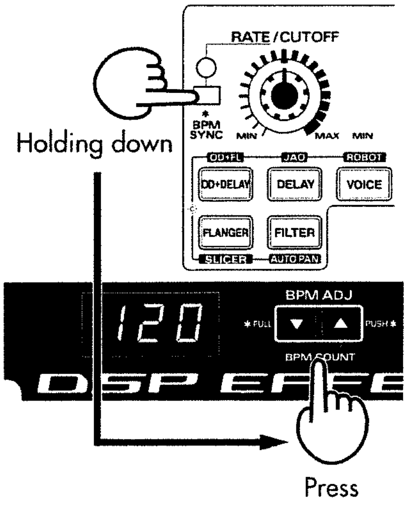


When the [BPM SYNC] button is ON, start by holding down [TAP BUTTON] and pressing the [MIDI CONTROL] button.

Adjusting the Synchronization Timing of MIDI Devices 2

([BPM SYNC] + the BPM ADJ [▲][▼] Buttons)

When you synchronize connected MIDI devices to the measured BPM from CD players, record players, or other connected equipment, the synchronization can drift a little because of the BPM settings, or wow and flutter from the record player. In situations like these, you can fine-tune the timing by which the sound is played without changing the set BPM.



While holding down the [BPM SYNC] button, press the BPM ADJ [▲][▼] buttons.

[▼] PULL: Moves back the timing of MIDI device sound production.

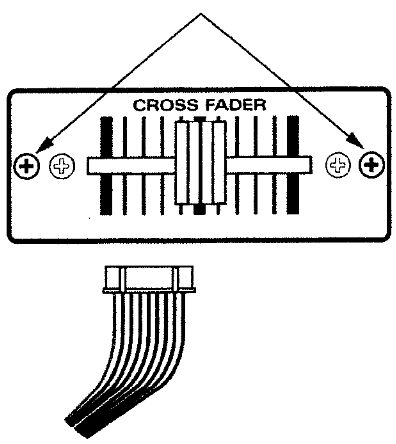
[▲] PUSH: Moves forward the timing of MIDI device sound production.

Replacing the Cross Fader

The Cross Fader is replaceable. If you begin to notice noise when the fader is moved, or if it no longer works as expected, or its action becomes unpredictable, replace with the Cross Fader for replacing the DJ-2000(CFX-1).
When replacing the Cross Fader, remove only the two outer screws holding it in place.
Make sure to switch off the power, and pull the plug from the outlet before beginning.

* To avoid the risk of damage to internal components that can be caused by static electricity, please carefully observe the following whenever you handle the board.
  - When handling the cross fader panel, grasp it only by its edges. Avoid touching any of the electronic components or connection terminals.
* Do not touch any of the printed circuit pathways or connection terminals.
* Never use excessive force when installing a connector. If it doesn't fit properly on the first attempt, remove the connector and try again.
* To avoid injury, be very careful around the opening's edges and near the circuit board.

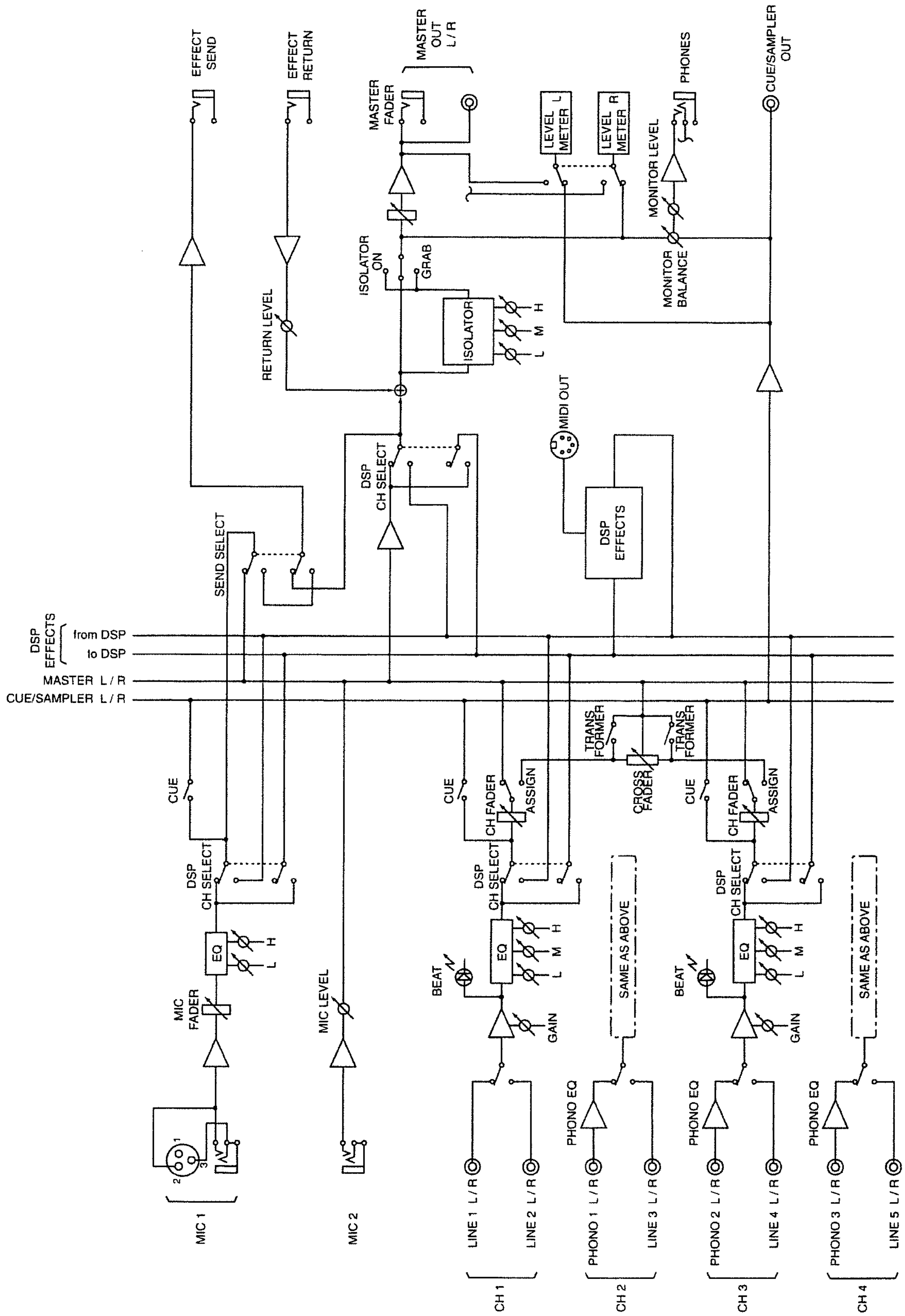
Unscrew and remove only the two outer screws.



Procedure

1. **Switch off the power to the unit.**
2. **Unscrew and remove only the two outer Cross Fader attachment screws.**
3. **Unfasten the connector from the Cross Fader unit.**
4. **Plug the connector into the new Cross Fader unit.**
5. **Replace and fasten the unit as before.**

* When circuit board installation is complete, double-check your work.
* When you wish to purchase the Cross Fader for replacing the DJ-2000 (CFX-1), please ask the retailer shop where you bought this unit.


EFFECT SEND
EFFECT RETURN
MASTER OUT L / R
MASTER FADER
PHONES
CUE/SAMPLER OUT
LEVEL METER L
LEVEL METER R
MONITOR LEVEL
MONITOR BALANCE
ISOLATOR ON
GRAB
ISOLATOR
H
M
L
RETURN LEVEL
MIDI OUT
DSP CH SELECT
DSP EFFECTS
SEND SELECT
DSP EFFECTS
from DSP
to DSP
MASTER L / R
CUE/SAMPLER L / R
TRANS FORMER
CROSS FADER
CUE
CH FADER
ASSIGN
EQ
BEAT
GAIN
SAME AS ABOVE
MIC FADER
MIC LEVEL
PHONO EQ
MIC 1
MIC 2
LINE 1 L / R
LINE 2 L / R
PHONO 1 L / R
LINE 3 L / R
PHONO 2 L / R
LINE 4 L / R
PHONO 3 L / R
LINE 5 L / R
CH 1
CH 2
CH 3
CH 4

Main Specifications/Input and Output Standards

Specifications

- Frequency Response: 20 Hz to 20 kHz ± 1 dB (GAIN = min)
- Total Harmonic Distortion: 0.05% or less (20 Hz to 20kHz rated output)
- S/N Ratio: 80 dB (Input terminated with 150 Ω, IHF-A, Typ.)
- Crosstalk: -70 dB or less (1 kHz between channels)
  -70 dB or less (1 kHz between L and R)
- Equalizer: HIGH : ±16 dB (12 kHz shelving type)
  MID : ±16 dB (2 kHz peaking type)
  LOW : ±16 dB (40 Hz shelving type)
- Isorator: HIGH : - ∞ to +12 dB
  MID : - ∞ to +12 dB
  LOW : - ∞ to +12 dB
- Power: AC 117 V, AC 230 V, AC 240 V
- Power Consumption: 35 W
- Dimensions: 482.0 (W) x 310.4 (D) x 111.9 (H) mm (7U)
  19 (W) x 12-1/4 (D) x 4-7/16 (H) inches
- Weight: 6.8 kg / 16 lbs

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

Input Standard

Input Socket	Rated Input Level	Non-Clip Max, Input	Input Impedance	Type of Connectors
MIC 1	-50 dBm (2.45 mV)	-10 dBm (245 mV)	2.2 kΩ	XLR-3-31 TYPE (UNBAL) 1/4" TRS PHONE (UNBAL)
MIC 2	-50 dBm (2.45 mV)	-10 dBm (245 mV)	2.2 kΩ	1/4" TRS PHONE (UNBAL)
LINE 1 - 5	-20 dBm (77.5 mV) (GAIN = max)	0 dBm (775 mV) (GAIN = max)	22 kΩ	RCA
	+ 4 dBm (1.23 V) (GAIN = min)	+24 dBm (12.3 V) (GAIN = min)		
PHONO 1 - 3	-55 dBm (1.38 mV) (GAIN = max)	-35 dBm (13.8 mV) (GAIN = max)	50 kΩ	RCA
	-31 dBm (22 mV) (GAIN = min)	-15 dBm (138 mV) (GAIN = min)		
RETURN	-10 dBm (245 mV)	+10 dBm (2.45 V)	100 kΩ	1/4" PHONE

Output Standard

Output Socket	Rated Output Level	Non-Clip Max, Output	Output Impedance	Type of Connectors
MASTER OUT	+ 4 dBm (1.23 V)	+20 dBm (7.75 V)	300 Ω	1/4" PHONE
	0 dBm (0.775 V)	+16 dBm (4.89 V)	2.2 kΩ	RCA
SEND OUT	-10 dBm (245 mV)	+10 dBm (2.45 V)	2.2 kΩ	1/4" PHONE
SAMPLER OUT	-10 dBm (245 mV)	+10 dBm (2.45 V)	2.2 kΩ	RCA
PHONES	----------	1W + 1W *1	10 Ω	1/4" STEREO PHONE

0 dBm = 0.775 Vrms

*1 Both Channels 33 Ω Loaded

MIDI Implementation

Model DJ-2000 Version 1.00 Date: Jan. 6, 1998

1. Transmission Data

1.1 Created messages

■ System Realtime messages

● Active Sencing

status

FEH

* This will be transmitted constantly at intervals of approximately 240 ms.

1.2 Created messages for syncronization

■ System Realtime messages

● Timing Clock

status

F8H

● Start

status

FAH

● Stop

status

FCH

Professional DJ Mixer
Model DJ-2000

MIDI Implementation Chart

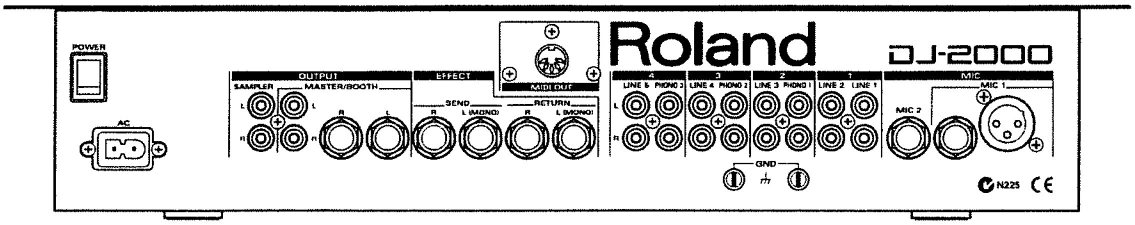
Date : Jan. 6, 1998
Version : 1.00

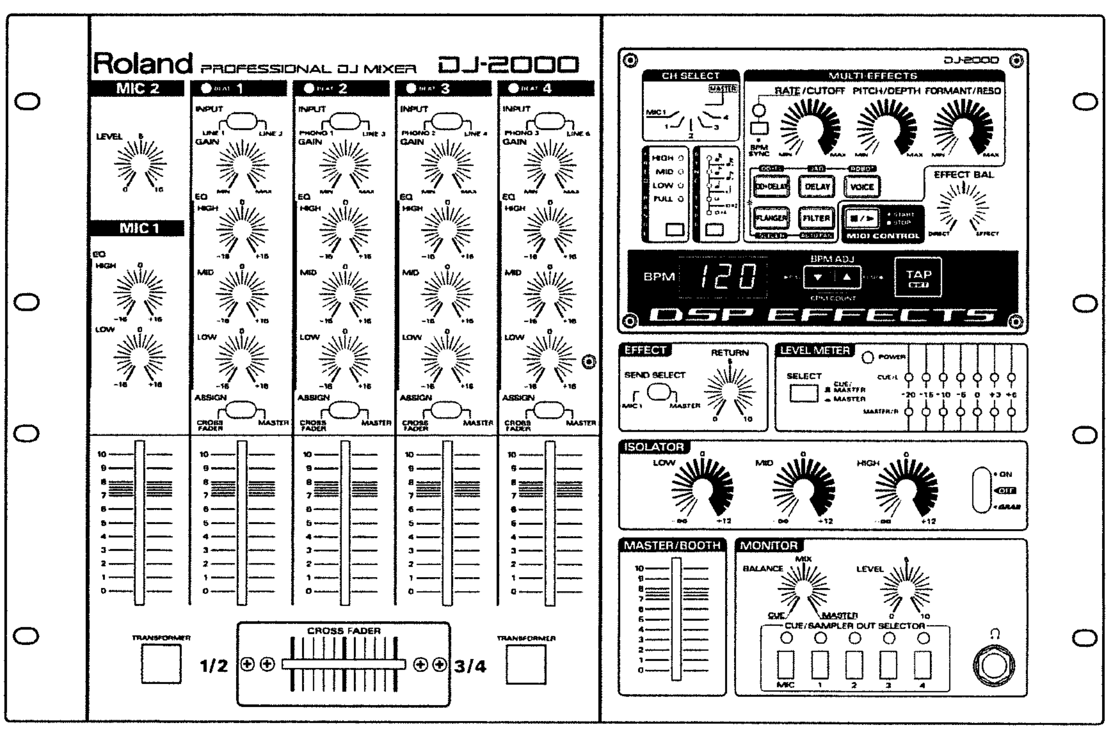
Function...		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	x x	x x	
Mode	Default Messages Altered	x x **************	x x	
Note Number :	True Voice	x **************	x x	
Velocity	Note ON Note OFF	x x	x x	
After Touch	Key's Ch's	x x	x x	
Pitch Bend		x	x	
Control Change		x	x	
Prog Change	: True #	x **************	x **************	
System Exclusive		x	x	
System Common	: Song Pos : Song Sel : Tune	x x x	x x x	
System Real Time	: Clock : Commands	O O	x x	
Aux Message	: All sound off : Reset all controllers : Local ON/OFF : All Notes OFF : Active Sense : Reset	x x x x O x	x x x x x x	
Notes				

Mode 1 : OMNI ON, POLY Mode 2 : OMNI ON, MONO O : Yes
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO X : No

Blank Chart

Copy this, then use it to jot down your settings.





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Information

When you need repair service, call your nearest Roland Service Center or authorized Roland distributor in your country as shown below.

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Instrumentos Musicales S.A.
Florida 638
(1005) Buenos Aires
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TEL: (01) 394 4029

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Roland Brasil Ltda.
R. Coronel Octaviano da Silveira
203 05522-010
Sao Paulo BRAZIL
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Roland Canada Music Ltd. (Head Office)
5480 Parkwood Way Richmond
B. C., V6V 2M4 CANADA
TEL: (0604) 270 6626

Roland Canada Music Ltd. (Toronto Office)
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Blvd, Etobicoke, ON
M9W 6Y1 CANADA
TEL: (0416) 213 9707

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Av. Toluca No. 323 Col. Olivar de los Padres 01780 Mexico D.F.
MEXICO
TEL: (525) 668 04 80

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Guadalajara, Jalisco Mexico
C.P.44100 MEXICO
TEL: (03) 613 1414

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Apartado 655 - Panama 1
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Roland Corporation U.S.
7200 Dominion Circle
Los Angeles, CA. 90040-3696,
U. S. A.
TEL: (0213) 685 5141

VENEZUELA
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Av. Francisco de Miranda,
Centro Parque de Cristal, Nivel
C2 Local 20 Caracas
VENEZUELA
TEL: (02) 285 9218

AUSTRALIA
Roland Corporation Australia Pty. Ltd.
38 Campbell Avenue
Dee Why West. NSW 2099
AUSTRALIA
TEL: (02) 9982 8266

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Auckland 3, NEW ZEALAND
TEL: (09) 3098 715

CHINA
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6 Huangmuchang Chao Yang
District, Beijing, CHINA
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Tom Lee Music Co., Ltd. Service Division
22-32 Pun Shan Street, Tsuen
Wan, New Territories,
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Rivera Traders Pvt. Ltd.
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Jl. Gajah Mada No.3—5,
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INDONESIA
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Cosmos Corporation Service Station
261 2nd Floor Nak-Won Arcade
Jong-Ro ku, Seoul, KOREA
TEL: (02) 742 8844

MALAYSIA
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140 & 142, Jalan Bukit Bintang
55100 Kuala Lumpur, MALAYSIA
TEL: (03) 2443333

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BLOCK 231, Bain Street #03-23
Bras Basah Complex,
SINGAPORE 180231
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#02-2148, SINGAPORE 489980
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Sultanate of OMAN
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31952 SAUDIARABIA
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aDawliah Universal Electronics APL
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SAUDI ARABIA
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Damascus - SYRIA
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Siraselvier Cad. Guney Ishani No.
86/6 Taksim, Istanbul TURKEY
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U.A.E.
P.O. Box 8050DUBAI, U.A.E
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DENMARK
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Fin-00201 Helsinki, FINLAND
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11 Brunswick Place Dublin 2
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Enterprise Park SWANSEA
West Glamorgan SA7 9FJ,
UNITED KINGDOM
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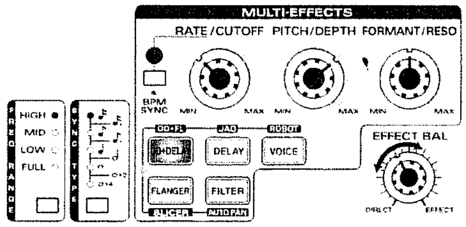
As of December, 25, 1997

Example of DSP Effects Settings

Example of settings in each of the DSP effects.
Listen to these effects as you move the controls indicated by arrows.
(Please also refer to p. 12-16 in the Owner's Manual.)

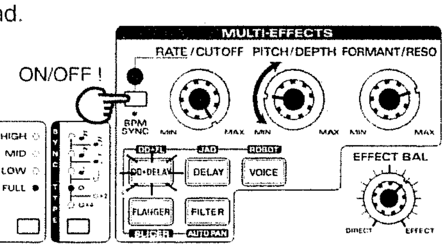
OD+DELAY

Adds mild distortion and delay to the sound.



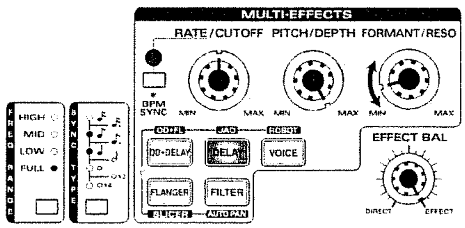
OD+FL

Adds mild distortion and a metallic reverberation to the sound.



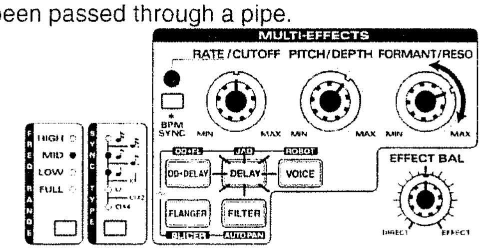
DELAY

Adds delay to the sound.



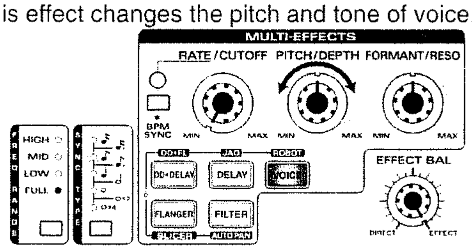
JAO

This effect changes the sound so it sounds like it has been passed through a pipe.



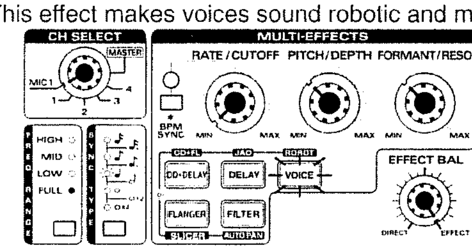
VOICE

This effect changes the pitch and tone of voice.



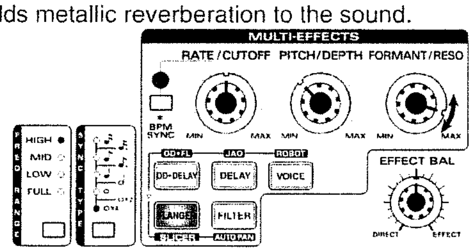
ROBOT **Vocal input only**

This effect makes voices sound robotic and mechanical.



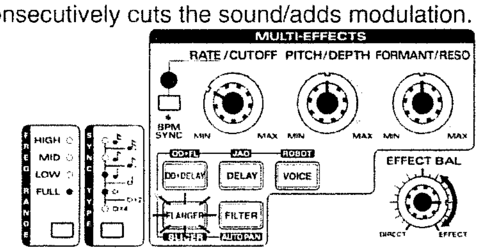
FLANGER

Adds metallic reverberation to the sound.



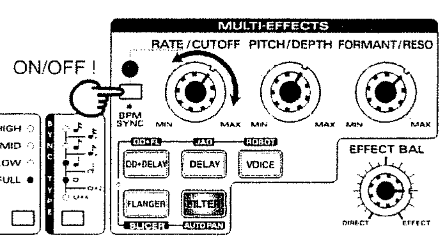
SLICER

Consecutively cuts the sound/adds modulation.



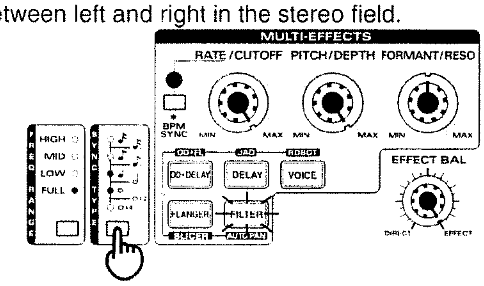
FILTER

This effect applies a filter to the sound.



AUTO PAN

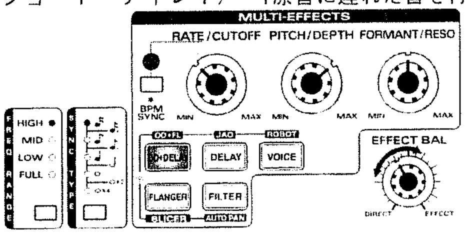
This automatically localizes the sound at a position between left and right in the stereo field.



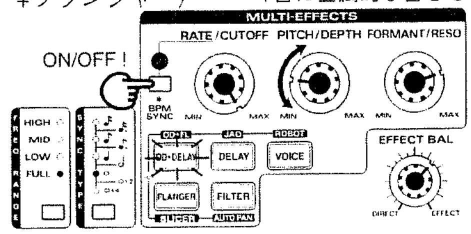
DJ-2000 DSPエフェクト部 設定例

各DSPエフェクトの設定の例です。
矢印がついているつまみは、動かして効果を確認してください。
（取扱説明書のP.12～16と併せてご覧ください。）

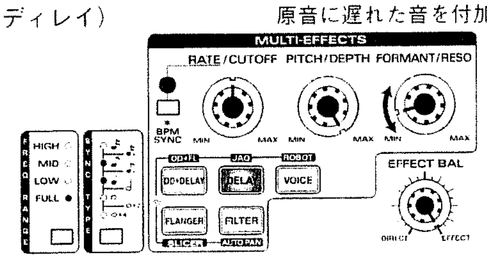
OD+DELAY
（オーバードライブ
+ショート・ディレイ）　音をマイルドに歪ませる
+原音に遅れた音を付加する



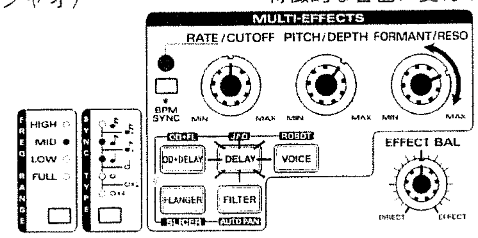
OD+FL
（オーバードライブ
+フランジャー）　音をマイルドに歪ませる
+音に金属的な響きをつける



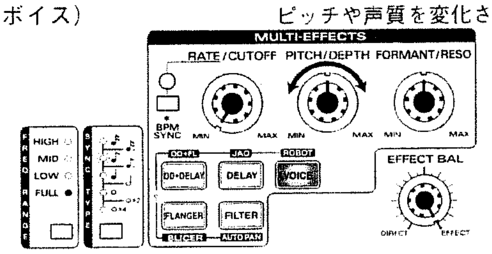
DELAY
（ディレイ）　原音に遅れた音を付加する



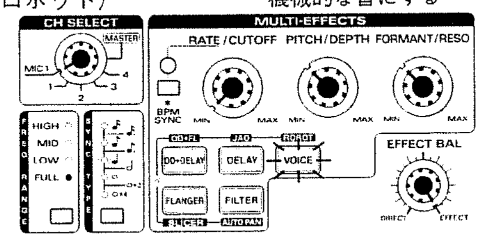
JAO
（ジャオ）　音をパイプに通したような
特徴的な音色に変える



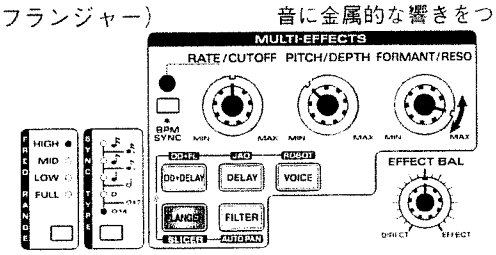
VOICE
（ボイス）　ピッチや声質を変化させる



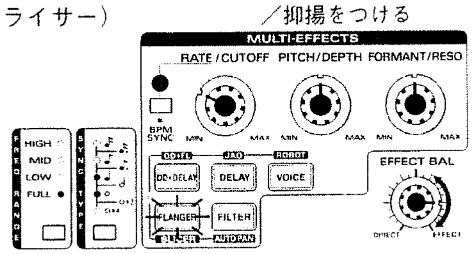
ROBOT
（ロボット）　マイク専用　声をロボットのような
機械的な音にする



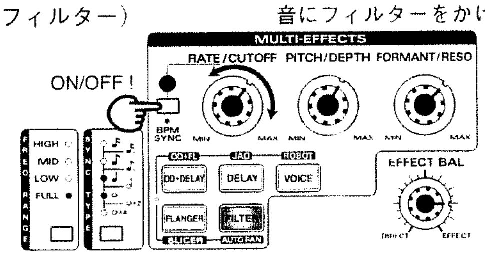
FLANGER
（フランジャー）　音に金属的な響きをつける



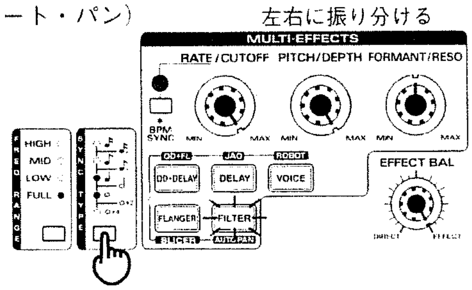
SLICER
（スライサー）　音を連続的にカットする
／抑揚をつける



FILTER
（フィルター）　音にフィルターをかける



AUTO PAN
（オート・パン）　音の定位を自動的に
左右に振り分ける



01567345　'98-3-OB1-21N

故障と思う前に

音が出なくなったり、動作がおかしくなったりしたときは、まず以下の点を確認してください。確認しても思ったように動作しないときは、お買い上げ店または最寄りのローランド・サービスにご連絡ください。

DSPエフェクトがかからない

● DSPエフェクトは、CH SELECTつまみで選択したチャンネルにかかります。エフェクトをかけたいチャンネルが選択されているか、確認してください。

● EFFECT BALつまみが、左（DIRECT：エフェクトのかかっていない音）に回し切った状態になっていないか、確認してください。

DSPエフェクト部のパラメーター可変つまみが動作しない

● DSPエフェクトによって、パラメーター可変つまみがBPM SYNC ON時、あるいはOFF時のみ動作するものがあります。各エフェクトの説明、およびPARAMETER CHART（P.17）をご覧ください。

スライサー（SLICER）が動作しない

● スライサーは、BPM SYNC ON時のみ動作します。スライサーを使用するときは、BPM SYNCをONにしてください。

フリケンシー・レンジ（FREQ RANGE）で選択した以外の音域が鳴る

● フリケンシー・レンジ（FREQ RANGE）で、FULL（全音域）以外の音域（HIGH／MID／LOW）を選択した場合でも、EFFECT BALつまみを左（DIRECT）に回すとFULL（全音域）のダイレクト音が出力されます。

BPMを自動計測できない

● BPMの自動計測は、CH SELECTつまみで選択したチャンネルで計測します。自動計測したいチャンネルが選択されているか、確認してください。

● チャンネルの入力感度が適正でないと、計測できないことがあります。GAINつまみ、およびEQのLOWつまみで調節してから、再度自動計測を行ってください。

● 曲調によっては、計測できないことがあります。

接続したMIDI機器がスタートしない

● MIDI機器をMIDI CONTROLボタンによってスタート／ストップさせるときは、接続したMIDI機器側のシンク・モードをスレーブにしてください。

● システム・リアルタイム・メッセージに対応していないMIDI機器を同期させることはできません。

ステレオ信号を入力したが、モノラルで出力される

● VOICE、JAO、ROBOTの各DSPエフェクトでは、入力信号をモノラル・ミックスして出力します。

マイクの音が出ない

● マイク専用チャンネル MIC 1にマイクを接続したとき、マスター部EFFECT SEND SELECTスイッチで"MIC 1"を選択すると、マイクの信号はEFFECT SEND端子に送られます。外部エフェクトを接続せずにマイクを使用する場合、EFFECT SEND SELECTスイッチは、"MASTER"を選択してください。

サンプラー等で録音中に発振音がする

● 録音するときは、録音機器の出力を接続している入力チャンネルのフェーダーを0にしてください。

● 録音するときは、録音機器の出力を接続している入力チャンネルとCUE／SAMPLER OUT SELECTスイッチが選択しているチャンネルが、同じにならないようにしてください。

● BOSS SP-202等をお使いの場合は、SOURCE MIXスイッチをOFFにしてください。

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Troubleshooting

If there is no sound or if the DJ-2000 does not operate as you expect it to, first check the following points. If this does not resolve the problem, contact your dealer or a nearby Roland service center.

The DSP effects do not apply

- The DSP effects are applied to the channel selected with the CH SELECT knob. Confirm that the channel to which you want effects added is selected.
- Check to make sure that the EFFECT BAL knob is not turned fully counterclockwise (DIRECT: the sound without the effects added).

Parameter controls in the DSP effects section don't work

- With some DSP effects, the parameter controls work only when BPM SYNC is set to ON; while with others, they work only when it is OFF. Please refer to the explanations for each of the effects and the PARAMETER CHART (p. 17).

SLICER doesn't work

- SLICER works only when BPM SYNC is set to "ON." Turn BPM SYNC "ON" when you want to use SLICER.

Frequency ranges other than what was selected for FREQ RANGE are sounded

- Even though a frequency range other than FULL (i.e., HIGH, MID, or LOW) has been selected for FREQ RANGE, the full-frequency, direct sound will be output if the EFFECT BAL control has been turned counter-clockwise (to DIRECT).

Can't get automatic measurement of BPM

- With automatic measurement of BPM, the channel selected with the CH SELECT knob is the one measured. Confirm that the channel you want automatically measured is selected.
- When the input sensitivity of the channel to be measured is not appropriate, may not be able to measure. Try the automatic measurement again after adjusting the sensitivity with the GAIN and EQ's LOW knobs.
- Automatic measurement may not be performed in some keys.

The connected MIDI device does not start

- When you want to use the MIDI CONTROL button to start and stop a MIDI device, you need to set the sync mode of the connected MIDI device to "Slave."
- You cannot synchronize with MIDI devices that do not support System Real-Time Messages.

The input signal is in stereo, but the output is in monaural

- With the DSP effects of VOICE, JAO, and ROBOT, the input signal is output as a monaural mix.

Sound from the microphone not heard

- When a microphone is connected to the exclusive mic channel MIC 1, then if "MIC1" is selected with the Master EFFECT SEND SELECT switch, the microphone signal is sent out through the mic signal send. If you are using a mic, but with no external effects connected, set the EFFECT SEND SELECT switch to "MASTER."

An oscillating sound appears during recording with the sampler or other device

- When recording, set the master fader of the input channel connected to the output of the recording device to 0.
- When recording, make sure that the input channel connected to the output of the recording device is not the same as the channel selected with the CUE/SAMPLER OUT SELECT switch.
- When using the BOSS SP-202 or similar device, set the SOURCE MIX switch to OFF.

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For EU Countries

This product complies with the requirements of European Directives EMC 89/336/EEC and LVD 73/23/EEC.

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.
This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

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PROFESSIONAL DJ MIXER DJ-2000

Roland Corporation

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